

Shorter Contributions

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UNUSUAL FORAGING BEHAVIOR OF A YELLOW-BILLED CUCKOO ON ASSATEAGUE ISLAND, VIRGINIA -- On 1 August 2002, I observed an unusual feeding behavior of an immature Yellow-billed Cuckoo (*Coccyzus americanus*) (age evident by absence of yellow in the bill and presence of large white spots on the undertail) on the Woodland Trail of the Chincoteague National Wildlife Refuge on Assateague Island. At about 1700 h, a cuckoo flew onto the branch of a deciduous tree at a height of about 7 m, just above a large Eastern Tent Caterpillar (*Malacosoma americana*) nest > 0.3 m in length. The cuckoo inched along the branch until it was directly over the nest which hung below the branch. It spent approximately 1 min visually inspecting the nest, likely waiting for potential prey to indicate its presence by moving (Hamilton & Hamilton, 1965). It then stretched its body forward apparently trying to obtain a prey item (Bender, 1961). It made two attempts in this way to extract prey but failed both times. It then jumped into the nest from above. It is not clear if the bird jumped through an opening or penetrated the wall of the nest. The cuckoo emerged with a 2.5 cm caterpillar in its bill within several seconds after it jumped. It also reemerged without any nest material covering its body and flew off almost immediately after capturing its prey.

Tent caterpillars weave nests that are closed to protect them from birds and insects (Rabaglia & Twardus, 1990). They are, nevertheless, vulnerable to foraging birds penetrating the nest to gain access. Bent (1940) described an instance of Yellow-billed Cuckoos tearing up a number of these nests in half a day. In view of the fact that the juvenile emerged from the nest without any of the nest material visible on its plumage, it is possible that either it or the adults or both had previously visited this nest and had already created an opening in the tent so that there was access to prey.

Although tent caterpillars are among the favored prey of Yellow-billed Cuckoos (Hughes, 1999), this foraging technique has not previously been reported in the literature on the species. Its most common foraging technique is gleaning insects from leaves and stems, typically while perched, but sometimes while hovering (Hughes, 1999). "Jumping" as a means of attacking prey is not a standard foraging behavior employed by non-raptorial landbirds using terrestrial habitats nor is it among the rare foraging maneuvers previously described for this group of birds (Remsen & Robinson,

1990). Silver Gulls (*Larus novaehollandiae*) use "jump-grabs" as one of several methods for stealing food from Crested Terns (*Sterna bergii*) in Australia. A ground-attacking gull jumps at a low-flying tern in an effort to grab a fish the tern is carrying in its bill (Hulsman, 1984). Likely, the cuckoo was able to capture a prey item by jumping into the nest, perching briefly, and then snatching a larva with its bill.

That an immature bird engaged in this aberrant behavior may reflect its relative inexperience in foraging. The caterpillar nest material represented a potential threat to the bird if it adhered to its plumage and diminished its capacity for flight. Damaged feathers have been shown to affect adversely the capacity for escape in European Starlings (*Sturnus vulgaris*) (Swaddle et al., 1996). Presumably the bird would not have endangered itself by getting tent material on its plumage, although a young bird may not have been able to assess the risks.

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LITERATURE CITED

- Bender, R. O. 1961. Food competition among closely related sympatric species. *Wilson Bulletin* 73: 214.
- Bent, A. C. 1940. Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds, and their Allies. United States National Museum Bulletin 176. 506 pp.
- Hamilton, W. J., III, & M. E. Hamilton. 1965. Breeding characteristics of Yellow-billed Cuckoos in Arizona. *Proceedings of the California Academy of Sciences* 32: 405-432.
- Hughes, J. M. 1999. Yellow-billed Cuckoo (*Coccyzus americanus*). In A. Poole & F. Gill (eds.), *The Birds of North America*, No. 418, The Birds of North America, Inc., Philadelphia, PA. 28 pp.
- Hulsman, K. 1984. Selection of prey and success of Silver Gulls robbing Crested Terns. *Condor* 86: 130-138.

Rabaglia, R., & D. Twardus. 1990. The Eastern Tent Caterpillar. U.S. Department of Agriculture, Forest Service. www.fs.fed/na/morgantown/fhp/palerts/etc/etc.

Remsen, J. V., & S. K. Robinson. 1990. A classification scheme for foraging behavior of birds in terrestrial habitats. *Studies in Avian Biology* 13: 144-160.

Swaddle, J. P., M. S. Witter, I. C. Cuthill, A. Budden, & P. McCowen. 1996. Plumage condition affects flight performance in Common Starlings--implications for developmental homeostasis, abrasion, and moult. *Journal of Avian Biology* 27:103-111.

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HEILIPUS APIATUS, A STRIKING LARGE WEEVIL NEW TO THE VIRGINIA FAUNA (COLEOPTERA: CURCULIONIDAE)--Collecting beetles for the Virginia Museum of Natural History at First Landing (formerly Seashore) State Park, City of Virginia Beach, during the period of 23 June-7 July 2003, Robert Vigneault obtained three specimens of a large black weevil with extensive white elytral ornamentation. Another specimen from the same locality, collected by Kurt A. Buhlmann of the Virginia Natural Heritage Program in 1989, was found among unidentified material in the VMNH beetle collection.

Reference to the antique but still indispensable manual on the weevils of eastern North America (Blatchley & Leng, 1916) led to identification of the beetle as *Heilipus apiatus* (Olivier, 1807). As evident from the photograph (Fig. 1), this is a stately and impressive insect, unlikely to be mistaken for anything else, and in fact, there are no close relatives in North America although the genus is extravagantly represented by at least 328 nominal species in the Neotropical Region (Blackwelder, 1947).

Blatchley & Leng (1916) mentioned Florida, Tennessee, and Georgia as known states of record. More recent sources have added Florence and Walterboro, South Carolina (Kirk, 1969, 1970), and Raleigh, Windsor, and Southern Pines, North Carolina

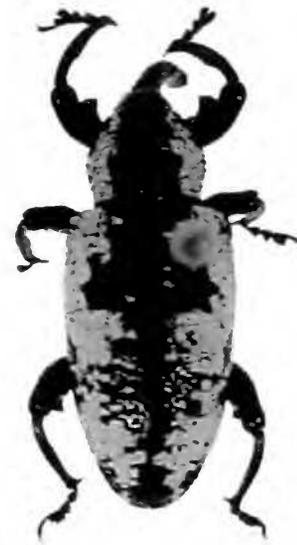


Fig. 1. *Heilipus apiatus* from First Landing State Park, City of Virginia Beach; body length = 14 mm (from base of beak to elytral apex) (photograph by Melody Cartwright, VMNH).

(Brimley, 1938); both of these authors used the junior synonym *Heilipus squamosus* LeConte.

Pin label data for North Carolina specimens in the North Carolina State University insect collection (kindly provided by Robert L. Blinn) reflect captures in the following counties and years: Bertie (1934), Brunswick (1954), Craven (1907), Dare (1961), Johnston (1976), Tyrell (1975), and Wake (1938). That these sites are all in the Coastal Plain is not surprising, a more interesting aspect of the data is the fact that no specimens of this large and conspicuous beetle have found their way into that collection since 1976. From the analogy of various other insects with austral distributions that have achieved dramatic northward dispersal in recent decades, one might have suspected that *H. apiatus* would likewise be responding to an apparent "global warming" episode. Just the opposite may have taken place, with the range currently in a state of fragmentation.

In Florida *H. apiatus* is considered a pest on cultivated avocados (Woodruff, 1963). Elsewhere it has been found on sassafras (*Sassafras albidum*) (Blatchley & Leng, 1916), a species in the same family (Lauraceae) that is widespread over most of eastern North America. The distinctly lowland distribution of *H. apiatus* is thus possibly a reflection of some environmental constraints other than host availability, unless, as suggested to me by Warren E. Steiner, the